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## **ABSTRACT**

| Original-quality MPEG coded video is processed to produce reduced-quality                     |
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| MPEG coded video for trick mode operation by removing non-zero AC DCT coefficients            |
| from the 8x8 blocks of I-frames of the MPEG coded video to produce I-frames of                |
| reduced-quality MPEG coded video, and inserting freeze frames in the reduced-quality          |
| MPEG coded video. Preferably, the coded video is stored in a main file, a fast-forward        |
| file and a fast-reverse file. The fast forward file and the fast reverse files contain        |
| reduced-quality I frames corresponding to original-quality I frames in the main file. A       |
| reading of the main file produces an MPEG transport stream for an audio-visual                |
| presentation at a normal rate, a reading of the fast-forward file produces an MPEG            |
| transport stream of the audio-visual presentation in a forward direction at a fast rate, and  |
| a reading of the fast-reverse file produces an MPEG transport stream of the audio-visual      |
| presentation in a reverse direction at a fast rate. Preferably, the files share a volume that |
| includes at least one GOP index associating the corresponding I frames of the files.          |

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